

REMARKS

This communication responds to the Office Action mailed on November 30, 2005. No claims are amended, no claims are canceled, and no claims are added. As a result, claims 1-28 are now pending in this Application.

§102 Rejection of the Claims

Claims 1-4, 7-12, 16-22 and 25 were rejected under 35 USC § 102(e) as being anticipated by Miyatani (U.S. 6,677,820; hereinafter “Miyatani”). The Applicant does not admit that Miyatani is prior art and reserves the right to swear behind this reference at a later date. In addition, because the Applicant does not believe the Office has shown that Miyatani discloses the identical invention as claimed, the Applicant respectfully traverses this rejection of the claims.

Anticipation under 35 USC § 102 requires the disclosure in a single prior art reference of each element of the claim under consideration. *See Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). It is not enough, however, that the prior art reference discloses all the claimed elements in isolation. Rather, “[a]nticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, *arranged as in the claim.*” *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). “The *identical invention* must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP § 2131 (emphasis added).

Perhaps some understanding of the difference between Miyatani and the claimed invention can be gained by examining some of the teachings in the reference. Miyatani first describes the reduction of amplifier distortion using a conventional predistortion process. *See Miyatani*, FIG. 11 and Col. 2, lines 3-50. An example of an uncompensated amplifier output signal is shown in FIG. 13, including a “distortion component (leak power to adjacent channels) out of the band of use due to distortion occurring in the amplifier 84.” Miyatani, Col. 2, lines 51-

58. Miyatani discloses that, while predistortion may be used to reduce output signal distortion components, the fine adjustment of compensation processing delay time becomes difficult and/or expensive. *See Miyatani, Col. 5, lines 7-11.*

Miyatani goes on to teach that the solution involves the use of a level detector 5 that “detects the level … of the *input signal* … and issues the result of the detection to the controller 12 by a digital value …”. *See Miyatani, Col. 14, lines 49-53* (emphasis added). That is, “the controller 12 generates an amplitude distortion … on the basis of the result of detection by the level detector 5 which is the level reflecting the level of the signal provided for the amplifier 4, and generates the phase distortion … for canceling the phase distortion occurring in the amplifier 4 by the variable phase shifter 3.” *See Miyatani, Col. 15, lines 52-60.* Thus, Miyatani teaches that the signal phase is adjusted according to the detected level of the *input signal* to the amplifier 4, and not “an indication of an amplitude of the output signal”, as claimed by the Applicant in all of the independent claims.

The difference between Miyatani and the embodiments claimed by the Applicant is highlighted by considering claim 17. The assertion by the Office that Miyatani teaches “detecting an envelope of the amplitude of the output signal” at Col. 13, lines 56-57 is incorrect because it is now apparent that the operation of the level detector 5, which receives only a clock signal from the clock source 9 and the transmission signal from the transmitter (as an input signal to the amplifier 4), is described therein. *See Miyatani, FIG. 1 and Col. 13, lines 56-57.* The difficulty is exaggerated by considering the assertion by the Office that “Miyatani teaches level detector (5) detect peak value of the output signal” of the amplifier with respect to the activity of “detecting a peak value of the amplitude of the output signal” as claimed by the Applicant in claim 18. This is because the level detector 5 detects the amplitude of the amplifier input signal, and not the amplifier output signal.

Thus, Miyatani does not teach or suggest “an adjustable phase to be adjusted in response to an indication of an amplitude of the output signal to reduce a phase distortion” as claimed by the Applicant in independent claims 1, 8, 11, and 26. Nor does Miyatani teach or suggest “adjusting a phase of an input signal of the amplifier responsive to the indication (of an amplitude of an output signal of an amplifier)”, as claimed by the Applicant in independent claims 16 and 22. Therefore, since Miyatani does not teach the identical invention claimed by

the Applicant, independent claims 1, 8, 11, 16, 22, and 26 should be in condition for allowance. Reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(e) is respectfully requested.

§103 Rejection of the Claims

Claim 7 was rejected under 35 USC § 103(a) as being unpatentable over Miyatani.

Claims 8-10 were rejected under 35 USC § 103(a) as being unpatentable over Miyatani in view of Tichauer (U.S. 6,597,244; hereinafter “Tichauer”). First, the Applicant does not admit that Miyatani or Tichauer are prior art, and reserves the right to swear behind these references in the future. Second, since a *prima facie* case of obviousness has not been established in each case, the Applicant respectfully traverses these rejections.

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d (BNA) 1596, 1598 (Fed. Cir. 1988). In combining prior art references to construct a *prima facie* case, the Examiner must show some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art that would lead an individual to combine the relevant teaching of the references. *Id.* The M.P.E.P. contains explicit direction to the Examiner that agrees with the *In re Fine* court:

In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant's disclosure. M.P.E.P. § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d (BNA) 1438 (Fed. Cir. 1991)).

An invention can be obvious even though the suggestion to combine prior art teachings is not found in a specific reference. *In re Oetiker*, 977 F.2d 1443, 24 U.S.P.Q.2d (BNA) 1443 (Fed. Cir. 1992). However, while it is not necessary that the cited references or prior art specifically suggest making the combination, there must be some teaching somewhere which provides the suggestion or motivation to combine prior art teachings and applies that

combination to solve the same or similar problem which the claimed invention addresses. One of ordinary skill in the art will be presumed to know of any such teaching. (See, e.g., *In re Nilssen*, 851 F.2d 1401, 1403, 7 U.S.P.Q.2d 1500, 1502 (Fed. Cir. 1988) and *In re Wood*, 599 F.2d 1032, 1037, 202 U.S.P.Q. 171, 174 (C.C.P.A. 1979)). However, the level of skill is not that of the person who is an innovator but rather that of the person who follows the conventional wisdom in the art. *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 474, 227 U.S.P.Q. 293, 298 (Fed. Cir. 1985). The requirement of a suggestion or motivation to combine references in a *prima facie* case of obviousness is emphasized in the Federal Circuit opinion, *In re Sang Su Lee*, 277 F.3d 1338; 61 U.S.P.Q.2D 1430 (Fed. Cir. 2002), which notes that the motivation must be supported by evidence in the record.

No proper *prima facie* case of obviousness has been established because combining the references does not teach all of the limitations set forth in the claims. First, as noted above with respect to independent claims 1 and 8, Miyatani does not teach or suggest “an adjustable phase to be adjusted in response to an indication of an amplitude of the output signal to reduce a phase distortion” as claimed by the Applicant. Neither does Tichauer. Thus, no combination of Miyatani and Tichauer can provide this missing element, and independent claims 1 and 8 are nonobvious in view of Miyatani and Tichauer. This conclusion applies with even greater force respecting dependent claims 7 and 9-10 since any claim depending from a nonobvious independent claim is also nonobvious. See M.P.E.P. § 2143.03.

Allowable Subject Matter

Claims 26-28 were allowed. Claims 5-6, 13-15, and 23-24 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, since it is believed that all of the independent claims are in condition for allowance, the opportunity to amend dependent claims 5-6, 13-15, and 23-24 is respectfully declined.

CONCLUSION

The applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone the Applicant's attorney, Mark Muller at (210) 308-5677, or the Applicant's below-named representative to facilitate the prosecution of this Application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 30th day of January 2006.

Amy Moriarty

Name

Signature

